

## COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

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IOSEPH E. CONNARTON. Executive Director

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## MEMORANDUM

TO: Watertown Retirement Board

FROM: Joseph E. Connarton, Executive Director

RE: Approval of Appropriation for FY20

DATE: November 26, 2018

This Commission is hereby furnishing you with approval of the FY20 appropriation under the revised funding schedule the Board recently adopted (copy enclosed). The schedule is effective in FY19 (since the amount under the prior schedule was maintained in FY19). This schedule is approved only through FY20, as the System is essentially projected to be fully funded at that point. We will use the results of your January 1, 2019 actuarial valuation to approve the FY21 appropriation.

Although we are approving the FY20 appropriation, we have some concerns that we previously outlined in an e-mail and to which the Board has responded. These issues are documented below.

Our primary concern is the significant decrease in the level of funding compared to the prior schedule. The revised schedule shows a decrease in the FY20 appropriation to \$8.3 million (from \$18.4 million in FY19). The reduction reflects the expected attainment of full funding at that time. When a system becomes fully funded, there are still annual normal cost payments (for benefits being accrued in the current year by active members). But attaining fully funded status is no guarantee of maintaining that status. Actuarial and investment losses (reflecting experience worse than anticipated), changes in plan provisions, and/or assumption changes can cause a once fully funded plan to again have unfunded liabilities (and therefore a significant increase in appropriation level). Furthermore, based on investment performance year to date, we expect it is less likely the System will be fully funded by FY20 based on the results of the 2019 actuarial valuation.

As a budgetary matter, we prefer a more gradual approach to reducing appropriation levels as a system nears, and then reaches, full funding. The schedule shows the \$10.1 million reduction outlined above in FY20 and another \$7.5 million reduction to \$811,000 (essentially the normal cost) in FY21. There is no conservatism in this second reduction and we expect it is unlikely that the 2019 actuarial valuation would support this amount especially with the expected change in at least the mortality assumption (see below). Past experience of several systems that attained full funding has shown us that reducing the appropriation to the level of only normal cost (or less) could require significant increases in funding if the system does not maintain its full funding status. We do not recommend a schedule in which the appropriation reflects only the normal cost unless a system's funded ratio is significantly greater than 100%. We are available to discuss this issue further.







The actuarial assumptions used are among the least conservative of any Chapter 32 system. The System maintained the 7.90% investment return assumption in this valuation. Only two systems use a greater assumption (8.0%). We have generally recommended an assumption between 7.25% and 7.40% for our 2018 local system valuations, with the most common recommendation being 7.35%. For comparison, there are 43 systems currently using an assumption of less than 7.50% and another 35 systems using a 7.50% assumption. The 7.90% assumption is outside the high end of our reasonable range.

Likewise the salary increase assumption is among the lowest in the state. Only 9 systems use an assumption of 3.5% or lower in valuations. We note page 3 of the valuation report shows a \$1.0 million loss on the salary assumption despite the current union contracts with COLAs of 2.25% and 2.0%.

The System maintained the fully generational mortality assumption adopted in 2016. That assumption is based on an experience study performed by your actuary. The mortality assumption we use for other local systems is based on our analysis of State retirees and reflects longer life expectancy than the assumption you adopted. We have not performed a recent retiree mortality analysis for local systems to compare our findings with the results of your actuary's study, although a study of retiree mortality is in process. However, based on our recent analysis of retiree mortality for the State Retirement System and results of our local system valuations, we could not justify the mortality assumption used in your valuation. We note that page 3 of the valuation shows a loss of \$3.8 million for inactive mortality (and data adjustment). Presuming the bulk of this loss is due to mortality, retirees are living longer than the assumption being used in the valuation. Our understanding is that your actuary will be proposing adopting the recently released public sector mortality tables for your next valuation. Based on his initial analysis, that assumption change would increase the plan's actuarial liability by more than 5%.

If the 2018 valuation were performed using PERAC's standard assumption set, we expect the actuarial liability would be more than 10% greater than that shown in your report. We expect the unfunded actuarial liability shown in the report of \$24.2 million would increase to more than \$45 million. Such a change would significantly impact the plans' funding schedule by increasing the appropriation in FY21 and/or extending the length of the amortization period.

Finally, we are aware the System has funded the plan aggressively and has ramped up the level of appropriation significantly twice in the past eight years while maintaining an amortization completion date of FY20 or so. We also understand the Town's goal to fund OPEB benefits with the reduced pension appropriations. PERAC has no responsibility with respect to OPEB funding but we did consider your past funding practice and the OPEB strategy as part of this approval memorandum.

We are available to discuss these issues further. If you have any questions, please contact PERAC's Actuary, Jim Lamenzo, at (617) 666-4446, extension 921.

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## Appropriation Forecast

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Fiscal		Employer	Amortization	Employer	Employer	Unfunded	
Year	Employee	Normal Cost	Payments	Total Cost	Total Cost	Accrued	Funded
<b>Ending</b>	<b>Contribution</b>	with Interest	with Interest	with Interest	% of Payroll	Liability	Ratio %**
2019	\$2,967,979	\$683,515	\$17,765,227	\$18,448,742	55.1	\$24,242,262	85.0
2020	\$3,120,329	\$675,922	\$7,625,034	\$8,300,956	23.8	\$7,970,797	96.2
2021	\$3,280,118	\$666,627	\$143,969	\$810,596	2.2	\$0	99.8
2022	\$3,447,697	\$655,508	\$149,288	\$804,796	2.1	. \$0	99.9
2023	\$3,623,435	\$642,433	\$145,231	\$787,664	2.0	\$0	99.9
2024	\$3,807,715	\$627,263	\$0	\$627,263	1.5	\$0	100.0
2025	\$4,000,941	\$609,851	\$0.	\$609,851	1.4	\$0	100.0
2026	\$4,203,532	\$590,043	\$0	\$590,043	1.3	\$0	100,0
2027	\$4,415,928	\$567,674	\$0	\$567,674	1.2	\$0	100.0
2028	\$4,638,591	\$542,572	\$0	\$542,572	1.1	<b>\$0</b> .	100.0
2029	\$4,872,002	\$514,553	\$0	\$514,553	1.0	\$0	100.0
2030	\$5,116,663	\$483,425	\$0	\$483,425	0.9	\$0	100.0
2031	\$5,373,102	\$448,983	\$0	\$448,983	0.8	. \$0	100.0
2032	\$5,641,870	\$411,012	\$0	\$411,012	0.7	\$0	100.0
2033	\$5,923,542	\$369,285	\$0	\$369,285	0.6	\$0	100.0
2034	\$6,218,721	\$323,563	. \$0	\$323,563	0.5	\$0	100.0
2035	\$6,528,037	\$273,592	\$0	\$273,592	0.4	\$0	100.0
2036	\$6,852,148	\$219,105	\$0	\$219,105	0.3	\$0	100.0
2037	\$7,126,234	\$227,869	\$0	\$227,869	0.3	\$0	100.0
2038	\$7,411,283	\$236,984	\$0	\$236,984	0.3	\$0	100.0
2039	\$7,707,734	\$246,464	\$0	\$246,464	0.3	\$0	100.0
2040	\$8,016,044	\$256,322	\$0	\$256,322	0.3	\$0	100.0
2041	\$8,336,685	\$266,575	\$0	\$266,575	0.3	\$0	100.0
2042	\$8,670,153	\$277,238	\$0	\$277,238	0.3	\$0	100:0
2043	\$9,016,959	\$288,328	\$0	\$288,328	0.3	\$0	100.0
2044	\$9,377,637	\$299,861	\$0	\$299,861	0.3	\$0	100.0
2045	\$9,752,743	\$311,855	\$0	\$311,855	0.3	. \$0	100.0
2046	\$10,142,852	\$324,329	\$0	\$324,329	0.3	\$0	100.0
2047	\$10,548,566	\$337,302	\$0	\$337,302	0.3	\$0°	100.0
2048	\$10,970,509	\$350,795	\$0	\$350,795	0.3	\$0	100.0
2049	\$11,409,329	\$364,826	\$0	\$364,826	0.3	\$0	100.0
2050	\$11,865,703	\$379,419	, \$0	\$379,419	0.3	\$0.	100.0
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